

2.3.1 Public Building Flood Damage

The economic impact to public buildings along the study reach was evaluated using available public building data, GIS data, and a flood damage curve. Figure 2-2 shows the eight public buildings that were identified along the study reach as having a flood damage potential. These eight public buildings were used to evaluate the economic impact of applying the three floodplain management alternatives. Appendix A contains photograph of each public building.

As Figure 2-2 illustrates, the Road Department Maintenance Building, the two Nebraska Game & Parks Buildings, and the new University Place Park Pool House are completely within the existing 100-year floodplain boundary, while the other four public buildings are just outside of the existing 100-year floodplain. The existing 100-year WSE for each building was determined using the HEC-RAS model results and the GIS mapping. The WSEs for the 1/2-foot and 1-foot rise alternatives were determined by adding 0.5-feet and 1.0-feet, respectively, to the existing 100-year WSEs. Linear interpolation was used to estimate the WSE between HEC-RAS cross sections. Table 2-1 summarizes the estimated 100-year WSE for the three floodplain management alternatives and provides the lowest adjacent grade determined from the available contours.